

CLAIMS:

1. A display device assembly (1) comprising
a flexible display device (2) being rollable around an axis (5),
the flexible display having a front side (3) and a back side (4),
one of the sides (3,4) being provided with distance means (7, 7',...) for
5 preventing a direct contact between the front side (3) and the back side (4).
2. A flexible display device assembly according to claim 1, wherein the distance
means comprise bars (7,7',...), which are positioned so as to induce bending lines (8,8',8'',...) in
the flexible display device that are oriented substantially parallel to the axis (5).
- 10 3. A flexible display device assembly according to claim 2, wherein the bars
(7,7',...) comprise transparent material and are mounted on the front side (3) of the flexible
display (2).
- 15 4. A flexible display device assembly according to claim 2, wherein the bars (7,
7',...) are positioned against each other, such that rolling of the flexible display device may
occur in only one direction (9).
5. A flexible display device assembly according to claim 2, wherein the flexible
20 display device is further provided with a layer of flexible material (21) that is positioned
between the bars (7,7',...) and the back side (4) of the display.
6. A flexible display device assembly according to claim 2, wherein the bars
(7,7',...) are provided to the display in the form of a piece of material having grooves (23)
25 that are oriented substantially parallel to the axis (5).
7. A flexible display device assembly according to claim 2, wherein outer
portions (31,31',...) of the spacer elements (7,7',...) are provided with spacer blocks (33,33',...)
for creating a housing for the flexible display device in the rolled-up state.

8. A flexible display device assembly according to claim 2, wherein blocks (35,35',...) are positioned on a back side (51) of the bars (7,7',...).

5 9. A flexible display device assembly according to claim 7, wherein each spacer block (33,33',...) has a display side (73,73',...) that is provided with a notch (71,71',...) for receiving the flexible display device (2).

10 10. A flexible display device assembly according to claim 1, wherein the distance means comprise a protection foil (80).

11. A flexible display assembly according to claim 10, wherein the display assembly further comprises guiding means (82) for guiding the protection foil (80) when the assembly (1) is being rolled into the unrolled state, such that the front side (3) of the display
15 is not covered by the protection foil (80).

12. A flexible display assembly according to claim 11, wherein the protection foil (80) is connected to the back side (4) of the display....

20 13. A flexible display assembly according to claim 11, wherein the display assembly is further provided with storing means (86) for storing the protection foil (80), when the display is in the unrolled state.

25 14. A flexible display assembly according to claim 13, wherein the storing means comprise a cylindrically shaped element (86) for winding the protection foil around.

15. A flexible display assembly according to claim 13, wherein the storing means (86) is arranged to enable a translational movement with respect to the housing (84).

30 16. A flexible display assembly according to claim 11, wherein the assembly is provided with a cylindrically shaped element for winding the display around (88), said cylindrically shaped element being arranged to be translatable with respect to the housing (84).